

What is claimed is:

- Sub 4
1. An intraocular lens system comprising [?]and insertion and injection device and a deflated lens member having an interior; wherein the insertion and injection device includes: a moveable member having a outlet port provided therein, an outer member in which is disposed the moveable member, wherein the deflated lens member is mounted about and to an end of the moveable member such that the deflated lens member is sealingly engaged with a portion of the moveable member so that the interior of the deflated lens member forms a compartment, and wherein the moveable member outlet communicates with the deflated member compartment.
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2. The intraocular lens system of claim 1, wherein the moveable member and the deflated lens member mounted thereon are moveable disposed within the outer member such that the moveable member is movable between a first position and a second position, the second position corresponding to a deployed condition of the deflated lens member external to the outer member.
3. The intraocular lens system of claim 2, wherein a distal end of the moveable member is configured and arranged so as to engage an interior surface of the deflated lens member whereby the deflated lens member is drawn out from the outer member when the moveable member is moved from the first position to the second position.
4. The intraocular lens system of claim 1, further comprising a source of an optical medium, the source being operably coupled to the insertion and injection device such that when the moveable member is in the second position, the optical medium is injected into the deflated lens member compartment via the moveable member outlet port.
5. The intraocular lens system of claim 4, wherein the moveable member includes a plurality of outlet ports.
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6. The intraocular lens system of claim 1, wherein the moveable member includes a plurality of outlet ports.

Sub 55 7. The intraocular lens system of claim 1, wherein the deflated lens member includes a self-sealing mechanism in which is removably and sealingly received the moveable member.

8. The intraocular lens system of claim 1, further comprising one or more haptics extending outwardly from the deflated lens member.

Sub 67 9. An intraocular lens system comprising an insertion and injection device and a deflated lens member having an interior; wherein the insertion and injection device comprises an outlet member, the deflated lens member is mounted to the outlet member.

10. A method for implanting an intraocular lens in an eye comprising:

mounting a deflated lens member about and to an end of a moveable member such that the deflated lens member is sealingly engaged with a portion of the moveable member so that an interior of the deflated lens member forms a compartment and such that an outlet port in the moveable member communicates with the deflated member compartment;

disposing an outer member about the moveable member;

inserting a portion of the outer member within the eye;

moving the moveable member from a first position to a second position, thereby deploying the deflated lens member; and

forming the intraocular lens by injecting an optical medium into the deflated lens member compartment when the moveable member is in the second position using the moveable member outlet port.

11. The method for implanting an intraocular lens according to claim 10, wherein said forming an intraocular lens further includes injecting a pre-determined amount of the optical medium into the deflated lens

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member compartment so as to selectively control the refractive power of the formed intraocular lens.

12. The method for implanting an intraocular lens according to claim 10, wherein while moving the moveable member to the second position, said moveable member acts on an interior surface of a distal end of the deflated lens member so as to cause the distal end to be first withdrawn from within the outer member.

13. The method for implanting an intraocular lens according to claim 12, wherein portions of the deflated lens member are successively withdrawn from the outer member by said moveable member acting.

14. The method for implanting an intraocular lens according to claim 10, further comprising moving the moveable member from the second position towards the first position after injecting the optical medium so as to withdraw the moveable member from the inflated lens member.

15. A method for treating one of aphakia or cataract of an affected eye, comprising:

removing the impaired natural lens of the affected eye;

mounting a deflated lens member about and to an end of a moveable member such that the deflated lens member is sealingly engaged with a portion of the moveable member so that an interior of the deflated lens member forms a compartment and such that an outlet port in the moveable member communicates with the deflated member compartment;

disposing an outer member about the moveable member;

inserting a portion of the outer member within the eye;

moving the moveable member from a first position to a second position, thereby deploying the deflated lens member; and

forming an intraocular lens by injecting an optical medium into the deflated lens member compartment when the moveable member is in the second position using the moveable member outlet port.

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16. The method for treating according to claim 15, wherein said forming an intraocular lens further includes injecting a pre-determined amount of the optical medium into the deflated lens member compartment so as to selectively control the refractive power of the formed intraocular lens.

17. The method for treating according to claim 15, wherein while moving the moveable member to the second position, said moveable member acts on an interior surface of a distal end of the deflated lens member so as to cause the distal end to be first withdrawn from within the outer member.

18. The method for treating according to claim 17, wherein portions of the deflated lens member are successively withdrawn from the outer member by said moveable member acting.

19. The method for treating according to claim 15, further comprising moving the moveable member from the second position towards the first position after injecting the optical medium so as to withdraw the moveable member from the inflated lens member.

20. A device kit comprising at least one insertion and injection device and a deflated lens member having an interior;
wherein the insertion and injection device includes:
a moveable member having a outlet port provided therein,
an outer member in which is disposed the moveable member,
wherein the deflated lens member is mounted about and to an end of the moveable member such that the deflated lens member is sealingly engaged with a portion of the moveable member so that the interior of the deflated lens member forms a compartment, and
wherein the moveable member outlet communicates with the deflated member compartment.

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